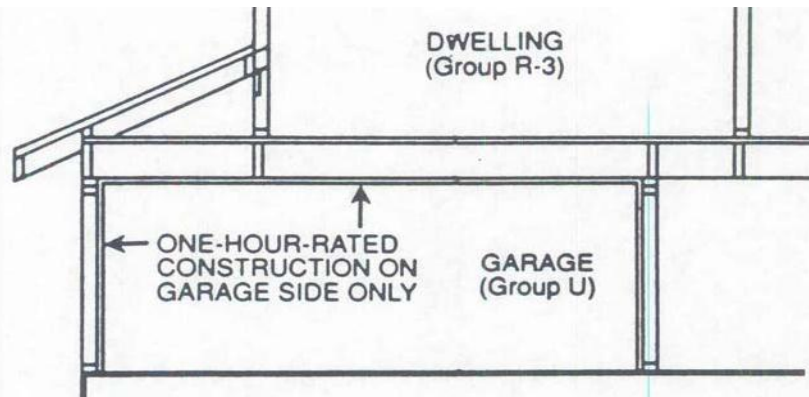


FIRE RATING OF SEPARATIONS 2010 CALIFORNIA BUILDING CODE SECTION 406.4.1



In order to help ensure that occupancies will be separated as intended, Section 302.2 states that occupancy separations shall be of such form "as may be required to afford a complete separation between the various occupancy divisions in the building." By this statement, the building official is granted discretion in determining whether or not the separation details for a particular project are adequate.

The code further requires that horizontal occupancy separations (usually floors) be supported by structural members or walls having the same fire rating as that required for the horizontal separation. Thus, in a Type V One-hour building of two stories where the second floor is required to be a two-hour fire-resistive occupancy separation, any walls or structural members in the first story supporting the second floor would be required to also be of two-hour fire-resistive construction. This would be the case even though the building generally is required to be only of one-hour fire-resistive construction. Obviously, if the horizontal occupancy separation is not supported by equivalent fire-resistive construction, the intent and function of the separation are negated if its supports fail prematurely.

Often overlooked is the fact that the provisions for the support of horizontal occupancy separations which apply to fully complying fire-resistive assemblies also apply to the reduced protection permitted for the separation between a dwelling (Group R, Division 3 Occupancy) and an attached private garage (Group U Occupancy). Note in Figure 302-2 that the full span of the joists and the supporting walls are protected, not just the portion common to the two occupancies.